# RAJYA SABHA

*Thursday, the 12th November, 1987/ 21 Kartika, 1909 (Saka)*

The House met at eleven of the clock, **Mr. Chairman** in the Chair.

## ORAL ANSWERS TO QUESTIONS

### Conservation of underground water resources in the country

*81. SHRI SURENDRA SINGH THAKUR: Will the PRIME MINISTER be pleased to state:

(a) the steps taken by Government so far to conserve the underground water resources in the country;

(b) whether the catchment areas of rivers have also been develop to conserve the ground water resources in the country; and

(c) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF TEXTILES AND THE MINISTER OF STATE OF THE MINISTRY OF WATER RESOURCES (SHRI RAM NIWAS MIRDHA): (a) Steps taken for conservation of ground water include catchment area development, water-shed management, and regulation of groundwater withdrawals.

(b) and (c) Centrally Sponsored Schemes on catchment area development and water-shed management have been implemented covering an area of 2 57 million hectare. Similar programmes have also been implemented in the State Sector covering a [illegible]il area of 6 87 mha. during 1980—87 [illegible]ese programmes are continuing

SHRI SURENDRA SINGH THAKUR: Mr. Chairman, Sir, the availability of ground water at various zones of the country depends on the aquifers with water. Sometimes these aquifers are barren—i.e. without water. A drilling hole is used to pump in water from the check dams/stop dams during the rainy season to re-charge these types of aquifers.

Secondly, if strata of Tenors is fissured or weathered, then the ponding method is adopted to raise the level of water of nearby wells in that area Vegetation in hilly zones also helps in raising the water table for open wells.

Has the Government established any formation for the maintenance of ground water resources like aquifers, open wells and tube-wells?

SHRI RAM NIWAS MIRDHA. Sir, as I have said in my reply, there are various schemes sponsored by the Central Government in the Ministry of Agriculture and the Ministry of Environment and Forests whose main purpose is to conserve ground water. I will first give the name of the scheme and then say what its purpose is. There is the centrally sponsored scheme for soil conservation work in the catchment areas of river alley projects. You know, Sir, in the river valley projects, a lot of siltation takes place and that causes great problems and the life of the dam is reduced. So there is a centrally sponsored scheme for that.

Then there is the scheme for integrated water-shed management in flood-prone areas. Here the aim is to reduce the peak flow of flood by taking various steps like afforestation, bunding and constructing other structures so that the flood levels are not as alarming as these would otherwise be

Then there are a number of schemes undertaking by our Ministry for the development of ground water resources.

The methodology suggested by the hon. Member is one of the ways in which the water can be re-charged. The Central Ground Water Board has surveyed a large portion of the country to see as to what type of ground water is available, what is its quantity and quality also We are experimenting with a lot of latest ideas on how to re-charge the water table where water level is going down. We have a UNDP scheme with this end in view.

The methodology suggested by the hon. Member of recharging the waters by ponding, by percolation etc. is a part of the general strategy to meet the situation.

SHRI SURENDRA SINGH THAKUR: Recently we have witnessed the paradoxical predicament of floods and drought in the country. A judicious exploitation and management of ground water conservation can prevent such situations. This requires a methodology based on high technology. Will the honourable Minister be pleased to state whether the Government has thought of this option and, if so, what action has been taken by the Government?

SHRI RAM NIWAS MIRDHA: Sir, the Government is very serious that the ground water resources of our country should be properly utilized. We have not yet utilized all the potential that we have so far as ground water in the country is concerned, and we are proposing to do it in a scientific way. But the problem comes in certain pockets of the country where, due to over-exploitation of ground water by tubewell pumping, etc., a difficult situation is coming up. For that, as far back as 1971 or thereabouts, a model Bill was circulated to the State Governments saying as to how ground water could be conserved. An authority was sought to be created under the draft Bill, which would seek which areas can be exploited, to what extent, and scientific advice was to result in some sort of a regulation of ground water exploitation Unfortunately, that model Bill of 1971 has not been adopted by any State Gujarat, Tamil Nadu and Karnataka are considering this. Gujarat even passed a law, which they never implemented. So we are again requesting the State Governments to see the situation as it is coming and regulate the use of ground water so that depletion does not take place through overdrawal.

SHRIMATI JAYANTHI NATRAJAN: Sir, I want to ask if the Government has taken any steps to conduct space-based remote sensing in order to have proper mapping and targeting of ground water. Are there any such maps by which ideal locations for recharging the aquifers are drawn up and, secondly, is there an integrated plan to identify the best locations where the percolation is good and will they be placed near the maximum consumption centres of water in order to ensure optimum utilization? Is there an integrated plan?

SHRI RAM NIWAS MIRDHA: Space observation is the latest technology that is available to us for delineating areas which can be used for ground water exploitation as well as for bunding and other types of irrigation works We have all the maps and they cannot be very exact, but they give an overall picture of the areas which we can exploit. Then we have to go and have exploration—exploratory tubewells—and again ascertain what the whole thing is about. So, I agree with the honourable Member that this latest technique of space observation should be followed and, actually, we are following it. We are developing an expertise for interpretation of the data that come through space observations and we are using it for the development of our programmes.

SHRI B SATYANARAYAN REDDY: Sir, in the answer given by the Minister, he has said that they are taking several measures to overcome this difficulty. The situation is very alarming Many parts of the country are affected by severe drought and even the level of ground water is coming down, wells and even bore wells going dry. So I would like to know from the Minister whether the Central Government has taken any steps and whether it has in mind any schemes to see that no water is wasted. Today we are seeing that a lot of river waters are flowing out into the sea and the schemes that we have undertaken are not even sanctioned by the Central Government I would like to know from the Minister whether the Central

Government is taking keen interest to see that the projects and other schemes for small tanks and percolation tanks that have been envisaged by the State Governments are implemented so that no water is wasted. In this connection I would like to remind the Minister that we had envisaged a huge project which is known as the Telugu Ganga project—a lot of water is going out into the sea and thus wasted—and even till date no clearance has come for that from the Central Government. I would like to known from the Minister whether any serious thought is given and attempts are being made by the Central Government to see that these projects and schemes for percolation tanks, small tanks and wells are fulfilled.

MR. CHAIRMAN: May I make a request? Let our supplementaries be short.

SHRI PARVATHANENI UPENDRA: We have to implement the 2-minute rule.

MR CHAIRMAN: Two minutes are for the main quetstion not for supplementaries.

SHRI RAM NIWAS MIRDHA: Sir, the drought situation in the country is really quite serious in some areas, and our Ministry has taken a number of steps to meet the situation. To assist the States in the construction of production wells, the Central Ground Water Board ordered redeployment of 25 drilling rigs engaged in the Ground-Water Exploration Programme in the country. Then, a special scheme has been approved by the Cabinet Committee on Drought We are buying more rigs The Russians are helping us with six rotary rigs and 35 pumping units. Wherever it is necessary, the State Governments are being assisted for deepening of well as well as construction of new wells.

Sir, as regards the general point that the hon. Member has raised that many of our rivers go and discharge into the sea and that their waters are not utilised, it is true that all the potential for irrigation that exists in our counrty is not fully utilised. But, over the years, we have been trying to assist the State Governments in whatever way we can in construction of irrigation projects including dams and other things.

Sir, as regards the Telugu Ganga, the position is well known. It is hardly conected with this question. But I would like to assure him that when all the incident problems and difficulties regarding the clearance of the project are sorted out, the Central Government would certainly give clearance to it.

**श्री अजीत जोगी** : मान्यवर, देश में जो भूमिगत जल उपलब्ध है उसके विस्तृत और वैज्ञानिक सर्वेक्षण के बिना यदि भूमिगत जल का दोहन किया जायेगा तो उसके दूरगामी असर हमारे पर्यावरण पर आयेंगे।

**श्री सभापति** : अच्छा तीसरा प्रश्न कर लें। बेसिक बातों में सब एग्रीड हैं।

**श्री अजीत जोगी** : इसलिए मैं प्रश्न करना चाहता हूं कि क्या ऐसा कोई विस्तृत वैज्ञानिक सर्वेक्षण पूरे देश का हो गया है जिससे हमें यह पता चल सके कि किन इलाकों में भूमिगत जल कितना उपलब्ध है और यदि ऐसा सर्वेक्षण किया गया है तो क्या ऐसे इलाके पहचाने गये हैं जहां ओवर एक्सप्लायटेशन आफ ग्राउंड वाटर या यदि ऐसे इलाके पहचाने गये हैं तो क्या उनके लिए कोई स्पेसिफिक योजनाएं बनायी गयी हैं जिससे हम भूमिगत जल का उचित दोहन कर सकें।

**श्री राम निवास मिर्धा** : श्रीमन्, सेंट्रल ग्राउंड वाटर बोर्ड हमारे देश के ग्राउंड वाटर का सर्वे कर रहा है और उस काम में करने के लिए उन्होंने 8 हजार स्टेशन्वे हाइड्रो ग्राफिक स्टेशन्स जिनको कहते हैं सारे देश में लगाये हैं। यहां पर चाहे कुएं हों या और जगह हों साल में चार बार

उनकी रीडिंग ली जाती है कि पानी ऊपर गया, नीचे आया, पानी की क्वालिटी कैसी रही, अच्छी रही बुरी रही इत्यादि। पूरी तरह से इसके बारे में सर्वे किया जाता है। इस तरह के स्टेशन्स ज्यादा से ज्यादा हों यह कोशिश की जा रही है और हम यही कोशिश करेंगे कि देश में जो भी ग्राउंड वाटर उपलब्ध है उसका पूर्ण सर्वेक्षण किया जाय और उसके आधार पर कुएं किस प्रकार खोदे, क्या करें इसके बारे में विचार करें।

श्रीमन्, सारे देश में जो क्षेत्र हैं इसको 3 क्षेत्रों में बांटा गया है, व्हाइट, ग्रे, और डार्क। व्हाइट क्षेत्र तो वह है जहां रीचार्जिंग होती है, उन कुओं में से उनको काफी कमर्शियल में पानी निकाला जाता है। ग्रे में कुछ ज्यादा निकाला जाता है और डार्क क्षेत्र वैसे है जहां काफी पानी निकाला जाता है। मतलब यह है कि इन क्षेत्रों में ज्यादा कुएं न खोदे जाएं और पानी को ज्यादा पंपिंग आदि करके न निकाला जाये। जो हमारे फाइनेंशियल इंस्टीटयूशंस लोन इत्यादि देते है तो इस बात का ध्यान रखते है कि किस क्षेत्र में कितने कुएं और किस प्रकार के कुएं बनाए जाये।

मैंने जैसा प्रारम्भ में बताया है। एक प्रस्तावित विधेयक सन् 1970 में एक राज्य सरकार को हमने भेजा था। उसका मकसद यही था कि पानी जो जमीन के नीचे से निकाला जाय उसका अच्छी तरह से ध्यान रखा जाय। और उन क्षेत्रों से न निकाला जाए जिसका असर दूरगामी पड़े और उससे पानी की कमी होने की वजह से दूसरे क्षेत्र पर असर पड़े, लेकिन कोई भी राज्य इस तरह का कानून बनाने के लिए तैयार नहीं है।

**श्री सभापति** यह तो आप बता चुके हैं, रिपीट मत कीजिए।

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SHRI BIR BHADRA PRATAP SINGH: Sir, exactly that was the question which I wanted to put. Anyway, what is the national policy on water utilisation? So far as the underground water is concerned, water level is most important. The recent drought has proved this thing. Tube wells went out of order.

MR. CHAIRMAN: What is your question?

SHRI BIR BHADRA PRATAP SINGH: I am coming to that. So far as surface water is concerned, my concern is the essential sector like drinking water, irrigation, electricity generation, micro and large floods. Land should not be left barron and the most important work to be done is that water should not flow to the sea and get wasted. So my question is: What is the national water management and utilisation policy of underground and surface water? This should be clearly laid down.

SHRI RAM NIWAS MIRDHA: The question of the hon. Member would impel me to tell everything that our Ministry is doing whether ground water or over water or whatever it is. Our policy is to utilise water resources on the surface or underground in the optimum possible way and all that we are doing by way of construction of dams, etc., or develop ground water by tube wells and other tube wells has just been done with that in view.

**श्री चतुरानन मिश्र** : सभापति महोदय, सरकार ने अपने जवाब में बताया है कि उन्होंने कुछ मेजर्ज लिये हैं पिछले एक डिकेड में -- मैं यह जानना चाहता हूं कि उन मेजर्ज के चलने लैंड मायस्चर तीनों डिफरेंट जोन्स में, व्हाइट, ग्रे और ब्लैक में क्या असर पड़ा? यह मेरा पहला प्रश्न है।

मेरा दूसरा प्रश्न इसी से संबंधित यह है कि आपने कहा कि राज्य सरकारों को आपने एक मॉडल बिल बना करके भेजा है, लेकिन उस पर कार्यवाही नहीं हो रही है।

तो उस संबंध में आप क्या करने जा रहे हैं और जो आपके हाथ की बात है कि गंगा जैसी नदियों को अगर सिंचाई में लावें, तो ग्राउंड वाटर पर कम प्रेशर पड़ेगा, उसके लिए आप क्या कर रहे है? इन तीनों बिंदुओं पर मैं सफाई चाहता हूं।

**श्री राम निवास मिर्धा** : श्रीमन, ग्राउंड वाटर का उपयोग अच्छी तरह से हो, इस नीति के बारे में संकेत किया और जो तीन क्षेत्र बताये गये हैं, इनको पूरी तरह से तो कानूनी तौर से क्रियान्वित नहीं किया जा रहा है क्योंकि किसी राज्य ने इस तरह का कानून नहीं बनाया है, लेकिन फिर भी भारत सरकार ने फाइनेंसिंग एजेंसीज की मारफत इन तीनों क्षेत्रों में कितने कुएं खोदे जाएं तो फाइनेंसिंग मेकेनिज्म के द्वारा उनको रेगुलेट करने की कोशिश की जा रही है और मैं समझता हूं कि वह पर्याप्त नहीं है, लेकिन जब तक राज्य सरकारें इसमें राजी न हों, तब तक वह नहीं किया जा सकता है।

माननीय सदस्य ने पूछा कि उसके लिये क्या कर रहे हैं, तो राज्य सरकारों से हमारा सम्पर्क है और समय-समय पर जब हम उनसे मिलते हैं, विचार-विमर्श होता है, तो उनसे यही कहते हैं कि दूरगामी दृष्टिकोण को लेकर यह अवश्य करना पड़ेगा कि ग्राउंड वाटर किन क्षेत्रों में किस प्रकार निकाला जाए। उसके बारे में कोई न कोई कानूनी रेगुलेशन होना आवश्यक है। इसलिए राज्य सरकारों से हम सम्पर्क में हैं।

जहां तक गंगा इत्यादि नदियों का पानी इस्तेमाल करने की बात है, वहीं समस्या आ जाती है। पानी इस्तेमाल तो किया जा रहा है, लेकिन इतनी जल्दी नहीं किया जा रहा है जितना कि माननीय सदस्य और सदन चाहता है, लेकिन फिर भी कोशिश कर रहे हैं कि सिंचाई के क्षेत्र में ज्यादा से ज्यादा प्रगति की जाए।

**श्री चतुरानन मिश्र** : सभापति महोदय, मेरा प्रश्न था कि सरकार द्वारा दी गई कार्यवाही से लैंड मायश्चर में क्या पड़ा है? इसके बारे में माननीय मंत्री जी ने जवाब नहीं दिया।

**श्री सभापति** : आपने बहुत सारी चीजें एक साथ कह दीं...

**श्री चतुरानन मिश्र** : पहला सवाल तो यह है कि आपने जो मेजर्स लिये हैं...

**श्री सभापति** : अब तो मैं दूसरा सवाल बुला चुका हूं।

**श्री चतुरानन मिश्र** : अगर आप यहां चाहें, तो ठीक है।

SHRI VITHALRAO MADHAVRAO JADHAV: Mr. Chairman, Sir, the present year is the worst drought year of the century. We have identified permanent drought prone areas in our country. May I know from the hon. Minister, what are the water sheds which are present in the permanent water zones of the country? what steps the Government is taking for exploitation of those water resources?

SHRI RAM NIWAS MIRDHA: Mr. Chairman, Sir, as you would see, this again is a very wide question and the various things we are doing by way of dams etc. are known to the House and to the hon. Member also. As regards the special drought programme, I have already said that to meet the emergent situation, we are trying to do whatever we can to help the State Government particularly for diversion of our own rigs for construction of wells, deepening of wells and help the States in all possible ways.

As regards the various catchment areas, again no specific answer can be given because it is a very wide question. If the hon. Member has any specific catchment in view, I can tell him.

PROF. C. LAKSHMANNA: Mr. Chairman, Sir, the hon. Minister while answering the supplementary stated that afforestation and social forestry is one of the important measures by which ground water could be preserved. But I would like to know from him whether he is aware that under these programmes, there is a lot of plantation of Eucalyptus and it is known that Eucalyptus takes a lot of water. Therefore, I

would like to know whether the Ministry has been making any efforts to discourage the utilisation of Eucalyptus in the social forestry. Secondly, one of the ways in which ground water could be preserved is to have systems like sprinkler water system or drip system. What has been the extent to which these two systems have been utilised in order to preserve the ground water?

SHRI RAM NIWAS MIRDHA: Sir, I will answer the last question first. We realised the importance of sprinkler system and the drip system to save water. Though they are capital intensive way of doing it but if you want to conserve water which we all want to, we have to resort to such methods. We have centrally sponsored schemes to give subsidy to the extent of 50 per cent for sprinkler system and drip systems to the State Government. Unfortunately, the State Governments have not fully made use of it and we are again persuading them that these modern methods have to be used so that whatever water is available is made use of in a scientific way and more and more areas are covered. So, we are very keen that sprinklers and the drip system should be promoted and we are in touch with the State Governments. They should make use of the subsidy a made available by us and see that they make full use of that. Well, as regards the general question of ground water development... (*Interruption*), I am coming to that. Well, I have mentioned three schemes, to start with. One is handled by the Ministry of Environment and Forest for catchment areas etc and what they grow again depends on the experts opinion. There cannot be that Eucalyptus is all bad or Eucalyptus is all good. It is not a situation like this. But we should leave it to the experts who have knowledge of the terrain, the soil, the agronomy and water table etc. and leave it to them what sort of plantation they do.

DR. (SHRIMATI) SAROJINI MAHISHI: Sir, the geologists of our country say that by the end of this century, the water resources in the country will be dried up. Even as on today, we have not been able to make use of water that is available by introducing the sprinkler system or the drip system. Sir, I would like to know whether the Government is aware of the tremendous water that is lost by seepage and satinity. Dut to these things, the water is also lost and the soil also becomes not usable for quite some time. Therefore, under these circumstances, I would like to know from the hon. Minister what the Water Management Board or the Underground Water Management Board is doing. Whether they are going to take immediate steps to make maximum utilisation of the minimum quantity of water and also to introduce the new system in the States and compel the States to use it as early as possible?

SHRI RAM NIWAS MIRDHA: Sir, the problem of seepage and water logging and salinity is really serious in some areas and the main cause is that when the irrigation projects are formulated, not enough attention is given for the linking of canals or for drainage works and that results in seepage from the canals and the distributaries and this water-logging and salinity is a very serious problem. The Government is seized of the problem and over the last few years, we are formulating special schemes under the command area management programme and other things to ensure that the proper darinage should be there, proper lining of canals should be there; so that the adverse effects like water logging and salinity as a result of irrigation do not take place.

श्री कर सिंह बाघेला : सर, सरकार जब आग लगी है तब कुंआ खोदने जा रही है जबकि कुंए में पानी ही नहीं है।

श्री सभापति : आप प्रश्न कीजिए।

SHRI VITHALRAO MODHAVRAO JADHAV: It is requested that the Member may give the number and then ask the question.

श्री शंकर सिंह बाघेला : आप नीचे से पानी निकालने की बात कर रहे हैं। ऊपर से पानी कैसे नीचे परकोलेट होगा ?

इसके लिए आप चैक डैम और नर्मदा सागर डैम जैसे डैम की बात कर रहे है। उस डैम को क्लिअर करने के लिए हमारा फारेस्ट और पर्यावरण विभाग बीच में आता है। पर्यावरण करता है बारिश नही होती है। पानी परकोलेट नही होता है। क्या सरकार की ऐसी नीति है कि वह ऐसे छोटे डैम--चैक डैम बनाए जिसमे पानी नीचे पहुचे और इसमे पर्यावरण के लिए आप क्या कार्यवाही कर रहे हैं?

**श्री राम निवास मिर्धा** : सभापति महोदय, जैसा कि अभी बताया, तीन ऐसी योजनाए केन्द्रीय सरकार द्वारा चलायी गयी है। इसमें केचमेंट एरियाज को कैसे सुधारा जाय, कैसे चैक डैम बनाया जाय, कैसे पेड़ लगाए जाए ताकि पानी बहकर नहीं जाए और वही रुक जाए और जो आसपास के कुएं है उनके जल का स्तर ऊचा हो इसके लिए हमारी कई योजनाएं उसी मकसद से बनी है। जहा तक नर्मदा सागर जैसे बड़े डैम का सवाल है, वह कितने छोटे कुओं को रिचार्ज करते हैं, वह तो दूसरी समस्या है लेकिन जहा तक छोटे सिचाई के साधन-मोडल कंजर्वेशन का काम है और जो ऐनी ट्स इत्यादि बनने चाहिएं, रिचार्ज करने के लिए, उस तरफ हम विशेष ध्यान दे रहे है।

SHRI GAYA CHAND BHUYAN: Conservation of water is very important. Where water is not taken for use, they allow it to go to the sea. Thus it is wasted. At least money is spent on dams, but water is not used. Excess water should be stored. The Central Government should take steps towards this and compel the State Governments to store and utilise the water going waste. The Centre should also allocate sufficient funds for such programmes.

MR. CHAIRMAN: What is the question?

SHRI GAYA CHAND BHUYAN: Will the Central Government allocate sufficient funds to the State Governments to benefit by the programmes to utilise excess water?

SHRI RAM NIWAS MIRDHA: Sir, the hon. Member and many other hon. Members have used the expression, 'the State Governments should be compelled' to do certain things. It is not the intention of the Central Government to compel the State Governments to do anything. They should be conscious of what is good for their States and they should utilise their resources. Whatever assistance under the allocation system, planning system, is available to them, will also be provided.

MR. CHAIRMAN: Question No. 82 Mr. Chitta Basu.

**Floods due to discharge of water from the D.V.C. Dam in West Bengal**

*82. SHRI CHITTA BASU: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that the discharge of huge amounts of water from the D.V.C. Dam has been the major factor of unprecedented floods in some districts of South Bengal;

(b) whether Government propose to take corrective steps in this regard; and

(c) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF TEXTILES AND THE MINISTER OF STATE OF THE MINISTRY OF WATER RESOURCES (SHRI RAM NIWAS MIRDHA): (a) No Sir.

(b) and (c) Do not arise.

SHRI CHITTA BASU: I am very much surprised to listen to the reply of the hon. Minister. I think the Chief Ministers of States are sufficiently responsible, at least not less responsible than the Ministers of the Union Government I have got a speech of the Chief Minister of West Bengal which was made in the meeting which was called by the Prime Minister to discuss the drought and flood situation. Here, the Chief